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the enzyme, withdrawing said enzyme inhibitors by chromatography and detecting the increasing concentration of said enzyme inhibitors per unit of time of at least one of [this] said cleavage products during an incubation time.

[The said process is charakterized by withdrawing the enzyme/inhibitors from the sample by means of chromatography]

- 2. (Amended) A process according to claim 1 characterized in that the sample passes through a column [(1)] filled with a chromatographic carrier that is treated with a substance capable of binding the enzyme inhibitors.
- 3. (Amended) A process according to [one of the claims 1 or 2] <u>Claim 2</u> characterized in that [the] said sample is diluted with a buffer qualified for the column.
- 4. (Amended) A process according to [one of the claims 1 to 3] <u>Claim 1</u> characterized in that a [suitable] buffer is added to [the] said sample in order to produce definite experimental conditions.
- 5. (Amended) A process according to [one of the claims 1 to 4] <u>Claim 1</u> characterized in that the substrate is held at constant temperature at least during the incubation time.
- 6. (Amended) A process/according to [one of the claims 1 to 5] <u>Claim 1</u> characterized in that the increasing concentration of one of the cleavage products of the substrate is detected by means of fluorimetry.

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7. (Amended) A device for measuring the activity of enzymes in liquid [by means of a process according to one of the claims 1 to 6 and 23 to 27, in particular] characterized in that there is provided a column [(1)] filled with a chromatographic carrier treated with a substance capable of binding such enzyme inhibitors which correspond to at least one enzyme in the sample, [and that there is] a valve-/pump-arrangement [(7, 11, 14, 15)] connected in series to the end of the column [(1)] so as to fill at least one test vessel with a [substrat] substrate and at least a part of the sample, and [that there is provided] a detector for measuring the increase of the concentration per unit of time of at least one cleavage product.

- 8. (Amended) A device according to claim 7 characterized in that the column [(1)] can be used repeatedly as there is an excess of the substance corresponding to the capacity of the column [(1)].
- 9. (Amended) A device according to [one of the claims 7 or 8] <u>Claim 7</u> characterized in that the column [(1)] is exchangeable.
- 10. (Amended) A device according to [one of the claims 7 to 9] <u>Claim 7</u> characterized in that the sample supply tube [(2)] is alternatively fed by the sampler [(3)] or a reservoir [(4)] containing column-buffer.
- 11. (Amended) A device according to claim 10 characterized in that there is provided a control device [(8)] connected in series to the column [(1)] in order to check the purity of the buffer discharged from the column [(1)].

device [(8)] works photometrically.

14. (Amended) A device according to [one of the claims 10 to 13] <u>Claim 10</u> characterized in that there is an arrangement [(9)] connected in series to the column [(1)] for measuring the degree of dilution of the discharged sample caused by the buffer of the column.

15. (Amended) A device according to claim 14 characterized in that the said arrangement [(9)] is able to measure the volume of liquids.

there is Claim 10 further including a device for mixing [(10)] connected in series to the column [(1)] as to produce a homogenous mixture of the said sample with the buffer of the column.

in that it enables, [you] by means of the valve-/pump-arrangement [(11, 14, 15) to admix], the mixing of a measuring buffer to the said sample to be measured[, and if need be] to the column buffer and to the substrate [in the trial vessel (5) as] to produce definite experimental conditions.

18. (Amended) A device according to [one of the claims 7 to 17] <u>Claim 7</u> characterized in that the detector [is including] <u>includes</u> a fluorimeter.

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- 19. (Amended) A device according to [one of the claims 7 to 18] <u>Claim 7</u> characterized in [that there are provided] means to guarantee a constant temperature in the trial <u>test</u> vessel [(5)].
- 20. (Amended) A device according to [one of the claims 7 to 19] <u>Claim 7</u> characterized in [that there is] at least one switching valve [(6)] between the sample supply tube [(2)] and the column [(1)] [which enables] to enable the sample alternatively to pass through the column or bypass the column in order to get in the [trial] test vessel.

in [that] at least one valve [(16) is provided in order] to pass a washing (cleaning) buffer at least through the column [(1)] and the valve-/pump-arrangement.

- 22. (Amended) A device according to [one of the claims 7 to 21] Claim 7 characterized in [that there is provided] a processor [(18) in order] to run and control the sample-feeding and [if need be] the column buffer-feeding [if need be] the degree of dilution of the sample to be measured, [and if need be] the mixing[,] and charging of the trial vessels [(5)] and the detection and evaluation of the concentration-increase per unit of time of at least one of the cleavage products of the substrate.
- 23. (Amended) A process for measuring enzyme inhibitors in liquids [especially] according to [the claims 1 to 6] Claim 1, which comprises withdrawing enzymes corresponding to at least one of the enzyme inhibitors in the sample to be measured by means of

chromatography and [analysing] <u>analyzing</u> the present concentration and/or activity of [the specific] <u>said at least one</u> inhibitors by means of specific assays.

- 24. (Amended) A process according to claim 23 characterized in that the sample to be measured is passed through a column [(1)] filled with a chromatographic carrier[, that is] and treated with a substance capable of binding enzymes.
- 25. (Amended) A process according to claim 23 [or 24] characterized in that the [manipulated] sample is diluted with a [suitable] column buffer[ in a definite manner].
- 26. (Amended) A process according to [one of the claims 23 to 25] <u>Claim 23</u> characterized in that there is added a [qualified (proper)] measuring buffer to the [manipulated] sample [as] to establish definite experimental conditions.
- 27. (Amended) A process according to [one of the claims 23 to 26] <u>Claim 23</u> characterized in that the material involved in the assay for measuring the concentration and/or activity of the inhibitor is held at constant temperature at least during the incubation time.

## Please add new Claim 28 as follows:

---28. The process of Claim 1, further including using a device for measuring the activity of enzymes in a liquid, including filling a column with a chromatographic carrier treated with a substance capable of binding such enzyme inhibitors which correspond to at least one enzyme in the sample, so as to fill at least one test vessel with a substrate and at least a part of





the sample with a valve-/pump-arrangement connected in series to the end of the column and providing a detector for measuring the increase of the concentration per unit of time of at least one cleavage product.---

Respectfully submitted,

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